#### SUMMARY OF THE 2004 DC AEL REVISION

The U.S.NAVY Damage Control AEL format/content development was the result of extensive reviews, research, and conclusive testing / evaluation of DC/FF equipment. The DC AEL reviews were conducted by the 2003 Damage Control/Firefighting Working Group as action items in splinter working groups.

Further recommendations and reviews are carried out by NAVSEA 05P4, ATG, FTG, Type Commanders, SWOS, and Lessons Learned on board ex-USS SHADWELL - 94, 95, 96 and Fleet DC casualties. Results of equipment tests and evaluations conducted at the DAMAGE CONTROL ENGINEERING TEST FACILITY (DCETF) were also used and then listed on the NAVSEA DAMAGE CONTROL WEBSITE (<a href="www.dcfp.navy.mil">www.dcfp.navy.mil</a>) in DC Central. The fleet conducts the final review and provides input to NAVSEA. The Naval Inventory Control Point (NAVICP) then enters the data in the updated 2004 AEL Revision.

The Inventory Aid Booklet for DC/FF Equipment S5090-BL-DCB-010 is provided to assist personnel in the inventory process. The Training Aid Book S5090-B1-TAB-010 lists the damage control equipment in alphabetical order. The DCOSIMS software is continually being updated to match the AELs, under the supervision of PEO Ship 400 F (Linda Stiles).

Example excerpts of the revised 2004 Damage Control Parent AELs and DC Kit AELs are provided in Enclosure (2). Added items are indicated with a line inserted to the location of the item description. Deleted items have a line through all words. This format allows Damage Control and logistics personnel to identify the changes without having to cross-reference old AELs. This assists in adding new materials and taking deleted items out of the DCRS inventory. These changes have been loaded to the weapons system file with the result being an automated cleaned version for the ships.

# A. The following is a summary of the 2004 Parent DCRS changes:

- 1. Anti-Flash Hoods
  - The new Grey Anti-Flash Hood is available for Repair Station personnel. The Gold Firefighter's Hood is worn by Firefighting Team Personnel and matches the color of the Fire Protection Gear (FPG).
- 2. <u>Boots-Rubber, Hip, Size-10</u> Deleted
- 3. Patch-Bucket Deleted
- 4. Cartridge -Battery Box (NFTI) Deleted
- 5. Chest-Tool Kit Deleted
- 6. <u>Fireman Gloves</u> The quantity of gloves will equal the number of SCBAs provided in each DCRS/DCREL.
- 7. Fireman Helmets The quantity required was increased by five except on AELs 2-

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880044200 thru 2-880044202.

- 8. Flange Blank, 1-4-inches Deleted
- 9. Gloves-Shell, Electrical Deleted
- 10. Helmet-Battle Deleted
- 11. Head Lanterns In 2004, they are to be deleted and replaced with Stealth Lights.
- 12. Kit-CBR Detection Equipment Deleted
- 13. Kit-CBR Personnel Equipment Deleted
- 14. Kit-Electrical Cable Repair-DC Deleted
- 15. Kit-Electronic Repair-DC Deleted
- 16. <u>Kit-Portable Hydraulic Access/Rescue System (PHARS)</u> Delete words Hydraulic & PHARS. New name-Portable Access Rescue System (PARS)

Addition-Select: Portable Electric Access Rescue Set –Power Hawk (PEARS).

- 17. Kit-Sounding-DC -Deleted
- 18. <u>Kit-Welding Equipment-DC</u> Deleted two (2) columns in 3 DCRS ship, or 66% for all ship classes.
- 19. <u>Casualty Power Switchbox</u> Deletions: Casualty Power Switchbox components; Connector Plug; and Casualty Power Wrench.

Casualty Power Warning Sign moved to Electrical Repair Kit. One Casualty Power Cable retained in each DCRS.

- 20. Jubilee Patches TBD by NAVSEA 05P4.
- 21. Flashlights Flashlights were replaced with new improved Saber Lights.
- 22. Plate Patch with J, T, (Folding Tee) & L Bolts -Deleted
- 23. <u>Batteries</u> "D" batteries were deleted and replaced with "C" cell batteries and additional "AA" batteries were added.
- 24. Bag-Lineman Tool Deleted
- 25. Life Preserver Deleted
- 26. PP-Powder Talc Deleted
- 27. Deleted from 2-880044200 AEL Battery "D" Cell; Calibration Kit Bacharach GN Type II; Cap Canister; CP Kit; M256 A1 Detector; Flashlights; Gloves -Shell, Electrical; Indicator-Oxygen; Life Preserver; Eleven (11) Individual sets-boxes of (Draeger Gas Free Toxic Test Tubes); Wrench-pipe 36-inch; Wrench-Socket, Tee-1/2-inch; PP-Lantern Head; PP-Powder Talc.

- 28. <u>Additions 2-880044200</u> Flashlight-Saber; "C" Cell Batteries (2-boxes); Kit-Gas Free Engineer.
- 29. Additions 2-880044201, -44210, -44211 Parent AELs Flashlight-Saber; "C" Cell Batteries (2-boxes).
- 30. Wrench-Socket, Tee-1/2-inch Deleted
- 31. Cap-canister, OBA Deleted
- 32. Oxygen Breathing Apparatus (OBA) and OBA Canisters Delete requirements when ship outfitted with SCBA.

# B. The following is a summary of the 2004 DCUL/DCUPS/DCREL AEL changes:

- 1. DAMAGE CONTROL UNIT LOCKERS (DCUL) Deletions: Canister, (C-2) MCU2A/P; CP-Kit M291 Decon; CP-Mask MCU 2A/P; Crowbar, Type 2 Size 4; Cutter-Bolt; Flashlight; Hammer-Hand; Hose-Nonmetallic 1-1/2" or 1/3/4" x 50'; Message Blanks; PP-Helmet-Battle; PP-Lantern-Head; and Wrench-Deck Drain. Additions: Flashlights
- 2. <u>DAMAGE CONTROL UNIT PATROL STATION (DCUPS)</u> Deletions: Canister, (C-2)-MCU2A/P; CP-KIT M291 Decon; CP-Mask MCU 2A/P; Bar-Wrecking 24"; Battery- "D" Cell; Flashlight; Kit-CPS Repair; Hose-Nonmetallic, 2-1/2"x 50'; Message Blanks; Gloves-Electrical; Gloves-Shell, Electric; Lantern-Flood, Sealed Beam Lights; Life Preservers; Kit-Bag Flyers; PP-Helmet-Battle; PP-Lantern-Head; and Tape-Measuring-Sounding, 50'.
- 3. RESCUE and ASSISTANCE REENTRY LOCKER (DCREL) Deletions: Blanket-Bed, 60" x 84"; Pistol-Pyrotechnical; Cap-Canister; Flags-Communications; Kit-Gas Free Engineer; Life Preservers Abandon Ship; Light-Signal; Litter-Rigid, Stokes; Lantern-Head; and Radio Portable.

### C. The following is a summary of the 2004 major DC Kit AEL changes:

1. Adapters Kit - Deleted Adapter - DBL (M) 4-inch Discharge and all twelve sizes (12) of Flanged Adapters and Pipe Adapters.

Additions: Connection Hose DM, 2-1/2 inch and Nipple Hose, 1-1/2 inch

- 2. Banding Kit No Changes
- 3. CPS Repair Kit- Added Scissors-Bandage
- 4. Kit-CBR Detection Equipment Deleted, Part of CBR AELs
- 5. <u>Kit-CBR Personnel Equipment Deleted, Part of CBR AELs</u>
- 6. Desmoking Kit Deleted Kit-Maintenance-moved Tech Library.

Additions: Duct Tape, One Box (1) Spring Clamps (12 each per box) and one each Smoke Curtain. Required quantity of Cable Assembly-Power 25-foot reduced from two to one each per Kit.

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- 7. Kit-DCPO No Changes
- 8. <u>Dewatering Kit</u> Deletions: Gaskets/Washers for hose couplings and nozzles.

Additions: The Aluminum 1-1/2 inch in-let Eductor, 1-1/2 or 1-3/4 x 25-foot Fire Hoses and Adapter, 4-inch DBL M-NHT.

- 9. Electric Cable Repair Kit Deleted
- 10. <u>Electrical Repair</u> Deletions: Belt-Tool Adjustable; Frame & Blade Hacksaw; Floor Matting; Chisel- Cold-Hand; White Electrical Tape; Hand Hammer; Boots Fireman, Size-12; Spectacles-Industrial-two pair; and Fuse Cartridge for Sub-Pump.

Additions: Casualty Power Danger Sign

- 11. Electronic Repair Kit Deleted
- 12. <u>Emergency Communications</u> When reordering emergency communications cable, use NSN 8130-00-263-8644 for the orange cable. Deletions: Salt/Pepper Cable Reel; Jacks/Plugs; and Message Blanks.
- 13. Emergency Lighting Deletions: Lantern-Flood Sealed Beam; Light-Chemical.
- 14. Engineering Spaces Deletions: Sealed beam lights, Battle Lantern Batteries 6-Volts; Cold Chisel; Hand-Hammer; Blade-Hacksaw; (Battle Lantern -Handle & Switch, Body Assembly-Lantern, Bracket Assembly); Caulking Iron; Chisel Firmer; Clamping Tool Outfit; Frame Hacksaw; Flyers Bag; Light-Chemical; Oakum-Spun Tar; Marline; Plug-Wood 10 X 7 X 12-inches-long; Plug-Wood 7 X 3 X 10-inches-long; Plug-Wood 0 X 4 X 10-inches-long (2-each size); Rule-Folding, 6 –foot; and Shears, Tailor -12-inch.

Quantity required reduced from two to one.

- 15. Fire Fighting/Access Equipment Deletions: Scaling Ladder, Nozzle, Firehose-Water, 2-1/2 inch, Nozzle Assembly AFFF, 1-1/2, Wedge-Steel, Joint Breaking (Sizes 4 & 5) Wrench-Spanner, sizes; 2-4-3/4 inch and ¾ to 2-inch. A Shovel and an Overhaul Rake, Forrest Fire were removed and added to the Repair Locker Tool Kit. Bag-Lineman Tool, 1-1/2 inch fire hose, Applicator 4-foot, In-Line Eductor each reduced from two to one,
- 16. Fire Fighting/Access Personnel Deletions: Winter Socks and PP-Lantern Head.
- 17. <u>Gas Free Engineer</u> In 2004, the Four Gas Analyzer and Draeger Test Kit remain the primary GAS FREE Instruments. All other instruments, Calibration Kits and Tool Box have been deleted.

Quantity required for Ethylene Oxide and Vinyl Chloride tubes changed from AR to one (1) set each.

18. <u>Investigator</u> - Deletions: Investigator's Belt; Gloves Shell, Electrical; Flashlight; and three (3) different sizes of Socket Wrenches-Tee.

Sounding Kit Function/Tools added to Investigator's Kit.

Additions: Flashlight-Saber and "C" Cell Batteries for lights on Parent AEL.

- 19. Monitoring No Changes
- 20. Pipe Patching Deletions: Chisel Firmer and Saw Metal Cutting, 18- inches long.
- 21. Plastic Patch/Pipe Repair No Changes
- 22. Portable Pump Accessories P-100 Pump Accessories.

Deletions: P-250 Pump and Fuel Tank; 2-inch Gasket-Washer for Exhaust Hose; and 2-inch x 20-foot Exhaust Hoses.

- 23. Sounding Kit Deleted; combined function with Investigator's kit.
- 24. <u>Plastic Patch/Pipe Repair</u> Kits are on the 2-880044201 MHC/MCM Class ships. No Changes
- 25. Plugging Deletions: Hatchet Lathing; Plug-Wood 10" x 7" x 12"; Plug-Wood 7" x 3" x 10", Plug-Wood 0" x 4" x 10", (2-each size), Shears-Tailors 12"; Tool Box Portable.
- 26. <u>PECU</u> Deletions: Clip-On Adapter Mask Welder (OBA) and Goggles-Industrial; Carry Harness; and Manual-Operators.
- 27. <u>PARS</u> An option to select one (1) from four (4) manufacturers is provided. Added the PEARS.
- 28. Repair Locker Tools Deletions: Chest Tool Kit; Chisel -- Blacksmith; Cutter-Cable; Chisel-Cold Hand; Connection-Hose DBL (M) 2-1/2"; Cutter Pipe 1/8" to 2" and 2-1/2" to 4"; delete all drill sizes except (1/4", pack of twelve retained); Hammer-Hand; Jack-Hydraulic 10-Ton; Marline; Nipple-Hose Fire 1-1/2"; PP-Cover-Lens OBA; PP Wrench Spanner OBA; Saw-Metal Cut, 18"; and Tape-Masking 3" x 50 YD.

Additions: Light-Chemical; Overhaul Rake-Forest Fire Shovel; Gaskets-various sizes; and Washers.

- 29. <u>Rescue and Assistance Chest</u> Deletions: Canister Oxygen Generating OBA; Inline Eductor Nozzle Assembly AFFF, 1-1/2"; Foot Valve Strainer 3".
- 30. <u>Shoring Material</u> Deletions: Bag Flyers; Wedges removed and added to Shoring Tool Kit.
- 31. Shoring Tool Kit Deletions: Chisel Cold Hand; Chisel Firmer; Hatchet-Half Type "C"; Nail-Common 20-D, 4-1/2" long; Pail 3 Gallon; Rule-Multiple Folding; Sand; and Saw-Circular Electric.

A 15" 9 pt. aggressive cut handsaw has replaced the 26" cross cut saw.

Additions: Wedges 2"- x 4" x 8" (22-each) and 2-1/4" x 4" x 18" (8-each).

- 32. <u>Sounding</u> Deleted, incorporated parts into the Investigator Kit AEL.
- 33. <u>Training Kit</u> New Training Equipment to be added.

- 34. Welding Some Welding Kits were deleted on all ship classes (66% or 1 of each 3 on AEL).
- 35. Shoring Supplement/GRP Repair No Changes
- 36. Safety/Survivability NDI Equipment AEL Range: 2-880044298 to 4299. Deletions: Alarm Personnel Alert; Duct Manhole/Scuttle; Flashlight- (moved to DCRS/Kit AELs); Kit Battery Conversion; Ladder Folding; Pole Man Overboard Rescue; Firefinder Sensor Heat; and Thermal Cutter-Diver Worn. Equipment for individual ship classes is by column.
  - 2-880044298 is for ships with 1 to 8 DCRS. 2-880044299 is for ships with 9 to 10 DCRS.

# D. DAMAGE CONTROL AELs were developed for the NDI Equipment:

As new equipment is introduced and phased in, it is put on the Safety/Survivability NDI Equipment AELs first, and then transfer to the appropriate DC Kit AEL when the equipment is logistically supported and fleet outfitting requirements completed.